

**From:** Hall, Steve

**Sent:** Wednesday, March 31, 2010 9:58 AM

**To:** Forman, Keith S CIV OASN (I&E) BRAC PMO West; Kito, Melanie R CIV NAVFAC SW

**Subject:** Revised ETCA Presentation

**Attachments:** ETCA Meeting 040110\_Rev.ppt

The revised presentation is attached. I'll be at the BRAC office at 1:30.

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# **HPS Parcels B and G ETCA Costs**



## **Early Transfer Costs for Parcels B and G Hunters Point Shipyard**

**April 1, 2010**



# ETCA Cost Assumptions



- Navy to prepare RDs and get BCT approval
- Navy to complete radiological removal actions for buildings and sewers
- Navy to mitigate and cap IR-7/18, including shoreline revetment
- Navy to complete TPH closures
- Navy to complete hot spot removal actions for Parcels B and G; stockpile removals at G
- Navy to remove pickling tank from Parcel G



## ETCA Cost Assumptions (Continued)



- Navy to get approval of methodology to develop soil gas action levels
- Navy to conduct parcel-wide soil gas surveys at Parcels B and G
- Using soil gas survey results, Navy will designate areas requiring institutional controls (ARIC)
- Vapor control needs to be developed after soil gas survey
- SVE to only be required at IR-10 and at no other areas in Parcels B and G



## ETCA Cost Assumptions (Continued)



- Remedial goals for Parcel G groundwater to be met by the groundwater treatability study; no more than 2 years of monitoring will be required to get BCT approval of closure
- Groundwater treatment at IR-10 will use only polylactate injection and MNA monitoring
- Only one cover included in costs (no interim; no replacement)
- Existing building foundations are part of final cover
- Sheet pile walls may be used near deteriorated seawall sections (near Dry Dock 6)



## ETCA Cost Assumptions (Continued)



- Cover in developed open space will be asphalt
- Cover for slopes will be a durable cover of clean soil, 2 feet thick
- Shoreline Revetments for IR-23 and IR-26
- Parcel B and G RACRs produced as single reports
- 30 years groundwater monitoring
  - 30 wells for groundwater elevation (each parcel)
  - Chemical concentration sampling, well numbers vary
    - Semiannual for years 1 and 2
    - Annual for years 3 through 30
  - One annual report



## ETCA Cost Assumptions (Continued)



- Navy to complete 2013 and 2018 5-year reviews
- IC/Maintenance costs included for 30 years
- Navy prepares 2010 Community Involvement Plan
- Fact Sheets
  - 2 fact sheets per year for years 1 through 5
  - 1 fact sheet per year for years 6 through 30
  - Only electronic fact sheets for years 11 through 30
- Includes Citizen Advisory Committee Meetings
- Annual Discount Rate of 3.1 percent



## Presented ETCA Costs Do Not Include



- Regulatory Oversight
- Environmental Insurance
  - Pollution Legal Liability (PLL)
  - Cleanup Cost Cap (CCC)
  - Risk Factor with Self Insured Retention and Co-Pay
- Administrative Support





# Cost Equations



$$\text{Total Costs} = P_B + P_G = (b) (4)$$

(b) (4)

$P_B$  = Parcel B Costs       $P_G$  = Parcel G Costs



# Parcel B Costs Breakout



$$P_B = P_{BI} + P_{BU}$$

Insured Costs:  $P_{BI} = PM + WP + RA + RC + CI$

Uninsured Costs:  $P_{BU} = VC + OM$

PM = Planning + Schedules + Database + Admin Record

WP = Remedial Action Work Plan

RA = IR-10 Soil Vapor Extraction + IR-10 Groundwater Treatment + Soil Covers + Sheet Pile Walls + Shoreline Revetments

RC = Remedial Action Completion Report

CI = Community Involvement

VC = Soil Vapor Controls

OM = Institutional Controls + 5-yr Reviews + Maintenance + Long-term Monitoring + Well Extensions and Rehabilitation + Well Abandonment



# Parcel G Costs Breakout



$$P_G = P_{GI} + P_{GU}$$

Insured Costs:  $P_{GI} = PM + WP + RA + RC + CI$

Uninsured Costs:  $P_{GU} = VC + OM$

PM = Planning + Schedules + Database + Admin Record

WP = Remedial Action Work Plan

RA = Soil Covers

RC = Remedial Action Completion Report

CI = Community Involvement

VC = Soil Vapor Controls

OM = Institutional Controls + 5-yr Reviews + Maintenance + Long-term Monitoring + Well Extensions and Rehabilitation + Well Abandonment



## Parcel B Costs



$$P_B = P_{BI} + P_{BU}$$

Insured Costs:  $P_{BI} = PM + WP + RA + RC + CI$

Uninsured Costs:  $P_{BU} = VC + OM$

(b) (4)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



# Parcel G Costs



$$P_G = P_{GI} + P_{BU}$$

Insured Costs:  $P_{GI} = PM + WP + RA + RC + CI$

Uninsured Costs:  $P_{GU} = VC + OM$

(b) (4)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



## Parcel B Costs (Continued)



- Soil cover costs:
  - Asphalt pavement on 136,600 yd<sup>2</sup> (28.2 acres) at (b) (4)/yd<sup>2</sup>
  - Soil cover on slopes on 3.5 acres requires 14,700 loose yd<sup>3</sup> imported fill
- Shoreline revetment costs:
  - 1,420 linear ft revetment at (b) (4) /ft



## Parcel G Costs (Continued)



- Soil cover costs:
  - Asphalt pavement on 127,300 yd<sup>2</sup> (26.3 acres) at (b) (4)/yd<sup>2</sup>